

### **REMARKS**

Claims 1-76 are pending in action, with claims 1, 19, 37, and 55 being independent.

Claims 1-5, 16-23, 34-41, 52-59, and 70-72 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,483,676 ("Mahany").

Claims 6-9, 12-15, 24-27, 30-33, 42-45, 48-51, 60-63, 66-69, and 73-76 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Mahany in view of US Patent No. 7,075,913 ("Yavuz").

Applicants respectfully traverse these rejections. Reexamination of the application and reconsideration of the action are respectfully requested in light of the following remarks.

### **Drawings**

Applicants respectfully request that the Examiner indicate that the drawing sheets for Figs. 1-2 replaced on November 1, 2007, and Figs. 3-10 filed on December 11, 2003, are acceptable.

### **Allowable Subject Matter**

Applicants acknowledge that claims 10-11, 28-29, 46-47, and 64-65 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Applicants reserve the right to rewrite claims 10-11, 28-29, 46-47, and 64-65 to include all of the limitations of the base claim and any intervening claims to be in allowable form.

### **Section 102 Rejections**

Claims 1-5, 16-23, 34-41, 52-59, and 70-72 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,483,676 ("Mahany"). Applicants respectfully traverse the rejection.

**Claim 1 and its dependent claims**

As an initial matter, the Examiner asserts that Mahany discloses “determining a packet loss indicator value from transmitted packets transmitted at a second data rate.” (Page 3 of Office Action dated June 6, 2008). The Examiner relies on col. 25, lines 44-58 of Mahany as allegedly disclosing this feature. However, the relied upon portion of Mahany relates to bit errors (and the use of a low rate when bit errors occur). (See Col. 25, lines 44-50). Mahany does not determine a packet loss indicator value. Applicants respectfully assert that bit errors are not the same as packet loss indicators – that is, bit errors are correctable, such as with ECC coding at the local device. Packet loss, on the other hand, is only correctable with re-transmission. For at least this reason, Applicants respectfully assert that the relied upon portions of Mahany do not teach or suggest Applicants’ claimed packet loss indicator value.

The Examiner also asserts that Mahany discloses “selecting a third different data rate in response to the received signal quality value and the packet loss indicator value,” as recited in claim 1. (Page 3 of Office Action dated June 6, 2008). Applicants acknowledge that the relied upon portion of Mahany discloses a “capability of automatically switching between two or more data rates.” (Col. 2, lines 41-42). However, Applicants respectfully submit that the Examiner has misinterpreted the statement, absent further context. More specifically, Applicants respectfully assert that Mahany provides no teaching or suggestion of selecting a third different data rate in response to the received signal quality and the packet loss indicator values.

Mahany describes the use of polling signals. (Col. 2, lines 46-57). Mahany states that “a base station may insert a test pattern of substantially higher data rate into the polling process, such that upgraded transceiver units can determine the feasibility of use of such higher data rate.” (Col. 2, line 65 to col. 3, line 5). Although test patterns may be sent at more than one higher data rate, the relied upon portions of Mahany disclose switching to the same higher data rates that are used to transmit the test patterns. The relied upon portions of Mahany do not teach or suggest selecting a third different data rate in response to the received signal quality value and the packet loss indicator value, determined from packets transmitted at a first data rate and a second data

rate, respectively. Accordingly, Applicants respectfully assert that the relied upon portions of Mahany do not teach or suggest Applicants' claimed selecting a third different data rate. For at least these reasons, claim 1 is allowable over Mahany.

Claims 2-5 and 16-18 depend from claim 1 and also are submitted to be allowable for at least the same reasons set forth above with respect to claim 1.

Claim 3 is separately allowable for at least the following additional reasons. The Examiner asserts that Mahany discloses that the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator value.

The Examiner cites to a statement in Mahany about comparing a total number of errors against a threshold value to make the data rate decision. (Page 5 of Office Action dated June 6, 2008). The relied upon portion of Mahany discloses "a running total of the number of detected errors" and an "error percentage". (Col. 17, lines 5-13). Applicants respectfully assert that neither the running total of the number of detected errors nor the error percentage is a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, or a CRC indicator value.

The Examiner further cites to a statement about bit error rate (BER). (Page 5 of Office Action dated June 6, 2008). However, the relied upon portion of Mahany only uses BER to describe a situation where factors prevent reliable continuous operation of a system. (Col. 19, lines 7-11) ("For a given bit error rate (BER) the combination of higher baseband low pass filter bandwidths and lower bit energies dictates a need for a stronger signal ..."). Applicants respectfully assert that the relied upon portion of Mahany does not teach or suggest a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, or a CRC indicator value.

Claim 4 is separately allowable for at least the following additional reasons. Claim 4 recites selecting the third different data rate from a plurality of available data rates. Because Mahany does not teach or suggest selecting a third different data rate, Mahany also does not teach or suggest selecting a third different data rate from a plurality of available data rates.

Claim 5 is separately allowable for at least the following additional reasons. The Examiner asserts that a “confidence value is merely the range of values within which the true value is assured to lie”. (Page 6 of Office Action dated June 6, 2008). As previously argued in Applicants’ response filed on May 7, 2008, Mahany neither teaches or suggests generating a confidence value nor generating the confidence value for each of a plurality of available data rates. Mahany determines a signal strength of a single carrier and selects a data rate. (Pages 14-15 of Reply to Action filed on May 7, 2008).

Claim 17 is separately allowable for at least the following additional reasons. The relied upon portions of Mahany do not teach or suggest a table indexed by available data rates and packet loss indicator values. Applicants respectfully suggest that the Examiner’s statement (i.e., “the data rate being programmable under software control” (Page 6 of Office Action dated June 6, 2008)) is immaterial to Applicant’s claimed subject matter. Applicant has claimed a table indexed by available data rates and packet loss indicator values. Although the data rate may be programmable, the table disclosed by Mahany contains “typical oscillator frequency offsets as a function of temperature.” (Col. 25, lines 59-61).

**Claim 19 and its dependent claims**

Claim 19 is directed to an apparatus and includes a rate selector operative to select a third different data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 1, claim 19 is allowable over Mahany.

Claims 20-23, and 34-36 depend from claim 19 and are allowable for at least the same reasons set forth above with respect to claim 19.

Claim 21 is separately allowable for at least the following additional reasons. Claim 21 is directed to an apparatus where the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator value. For at least the same reasons set forth above with respect to claim 3, claim 21 is allowable over the Mahany.

Claim 22 is separately allowable for at least the following additional reasons. Claim 22 is directed to an apparatus and includes a table including a plurality of available data rates. For at least the same reasons set forth above with respect to claim 17, claim 22 is allowable over the Mahany.

Claim 23 is separately allowable for at least the following additional reasons. Claim 23 is directed to an apparatus and includes a rate selector further operative to generate a confidence value for each of a plurality of available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claim 23 is allowable over Mahany.

Claim 35 is separately allowable for at least the following additional reasons. Claim 35 is directed to an apparatus and includes a table indexed by available data rates and packet loss indicator values. For at least the same reasons set forth above with respect to claim 17, claim 35 is allowable over Mahany.

**Claim 37 and its dependent claims**

Claim 37 is directed to an apparatus and includes means for selecting a third different data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 1, claim 37 is allowable over Mahany.

Claims 38-41 and 52-54 depend from claim 37 and are allowable for at least the same reasons set forth above with respect to claim 37.

Claim 39 is separately allowable for at least the following additional reasons. Claim 39 is directed to an apparatus where the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator value. For at least the same reasons set forth above with respect to claim 3, claim 39 is allowable over the Mahany.

Claim 40 is separately allowable for at least the following additional reasons. Claim 40 is directed to an apparatus and includes a table including a plurality of available data rates. For at

least the same reasons set forth above with respect to claim 17, claim 40 is allowable over Mahany.

Claim 41 is separately allowable for at least the following additional reasons. Claim 41 is directed to an apparatus and includes means for generating a confidence value for each of a plurality of available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claim 41 is allowable over Mahany.

Claim 53 is separately allowable for at least the following additional reasons. Claim 53 is directed to an apparatus and includes a table indexed by available data rates and packet loss indicator values. For at least the same reasons set forth above with respect to claim 17, claim 53 is allowable over Mahany.

**Claim 55 and its dependent claims**

Claim 55 is directed to a computer-readable medium and includes selecting a third different data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 1, claim 55 is allowable over Mahany.

Claims 56-59 and 70-72 depend from claim 55 and are allowable for at least the same reasons set forth above with respect to claim 55.

Claim 57 is separately allowable for at least the following additional reasons. Claim 57 is directed to a computer-readable medium where the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator value. For at least the same reasons set forth above with respect to claim 3, claim 57 is allowable over the Mahany.

Claim 58 is separately allowable for at least the following additional reasons. Claim 58 is directed to a computer-readable medium and includes selecting the third different data rate from a plurality of data rates. For at least the same reasons set forth above with respect to claim 4, claim 58 is allowable over Mahany.

Claim 59 is separately allowable for at least the following additional reasons. Claim 59 is directed to a computer-readable medium and includes generating a confidence value for each of a plurality of available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claim 59 is allowable over Mahany.

Claim 71 is separately allowable for at least the following additional reasons. Claim 71 is directed to a computer-readable medium and includes a table indexed by available data rates and packet loss indicator values. For at least the same reasons set forth above with respect to claim 17, claim 71 is allowable over Mahany.

### **Section 103 Rejections**

Claims 6-9, 12-15, 24-27, 30-33, 42-45, 48-51, 60-63, 66-69, and 73-76 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Mahany in view of US Patent No. 7,075,913 ("Yavuz").

Claims 6-9, 12-15, and 73 depend from claim 1. The Examiner does not now assert that Yavuz discloses claim 1. Notwithstanding, as previously argued in Applicants' response filed on November 1, 2007, Yavuz neither teaches or suggests selecting a data rate, let alone a third different data rate, in response to the received signal quality value and the packet loss indicator value; nor does Yavuz disclose determining a packet loss indicator value from transmitted data. Yavuz discloses using a higher data rate and retransmitting the data a fixed number of times. (Pages, 18-19 of Reply to Action filed on November 1, 2007). Therefore, claims 6-9, 12-15, and 73 are allowable for at least the same reasons set forth above with respect to claim 1.

Claim 6 is separately allowable for at least the following additional reasons. Claim 6 recites generating an adjustment value for the received signal quality value from the packet loss indicator value. The Examiner previously acknowledged that Mahany does not disclose this subject matter and does not now reject claim 6 as anticipated by Mahany. Yavuz does not cure this deficiency. Yavuz only discloses a data rate multiplier that is greater than 1. (Abstract).

Yavuz does not teach or suggest generating a separate adjustment value from a packet loss indicator value.

Claims 6-9 and 12-13 are separately allowable for at least the following additional reasons. Claims 6-9 and 12-13 depend from claim 5. The Examiner does not now assert that Yavuz discloses claim 5. Notwithstanding, as previously argued in Applicants' response filed on November 1, 2007, Yavuz neither teaches or suggests generating confidence values using a received signal quality value and a packet loss indicator value, nor generating a confidence value for each of a plurality of available data rates. Yavuz only discloses that the data rate multiplier is greater than 1, and a single data rate multiplier used to calculate a single serviced data rate. (Pages, 19-20 of Reply to Action filed on November 1, 2007). Therefore, claims 6-9 and 12-13 are allowable for at least the same reasons set forth above with respect to claim 5.

Claims 24-27, 30-33, and 74 depend from claim 19. Claim 19 is directed to an apparatus and includes a transmit section operative to transmit packets at a first data rate and to determine a packet loss indicator value, and a rate selector operative to select a third different data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claims 6-9, 12-15, and 73 (that depend from claim 1), claims 24-27, 30-33, and 74 (that depend from claim 19) are allowable over a combination of Mahany and Yavuz.

Claims 24-27 and 30-33 are separately allowable for at least the following additional reasons. Claims 24-27 and 30-33 depend from claim 23. Claim 23 is directed to an apparatus where the rate selector is further operative to generate a confidence value for each of a plurality available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claims 24-27 and 30-33 (that depend from claim 23) are allowable over a combination of Mahany and Yavuz.

Claims 30-31 are separately allowable for at least the following additional reasons. Claims 30-31 depend from claim 24. Claim 24 is directed to an apparatus and includes a retry processor operative to generate an adjustment value for the received signal quality value from the packet loss indicator value. For at least the same reasons set forth above with respect to claim 6,



claims 30-31 (that depend from claim 24) are allowable over a combination of Mahany and Yavuz.

Claims 42-45, 48-51, and 75 depend from claim 37. Claim 37 is directed to an apparatus and includes means for transmitting packets at a first data rate, and means for determining a packet loss indicator value; and means for selecting a third different data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claims 6-9, 12-15, and 73 (that depend from claim 1), claims 42-45, 48-51, and 75 (that depend from claim 37) are allowable over a combination of Mahany and Yavuz.

Claims 42-45 and 48-49 are separately allowable for at least the following additional reasons. Claims 42-45 and 48-49 depend from claim 41. Claim 41 is directed to an apparatus that includes means for generating a confidence value for each of a plurality available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claims 42-45 and 48-49 (that depend from claim 41) are allowable over a combination of Mahany and Yavuz.

Claims 48-49 are separately allowable for at least the following additional reasons. Claims 48-49 depend from claim 42. Claim 42 is directed to an apparatus and includes means for generating an adjustment value for the received signal quality value from the packet loss indicator value. For at least the same reasons set forth above with respect to claim 6, claims 48-49 (that depend from claim 42) are allowable over a combination of Mahany and Yavuz.

Claims 60-63, 66-69, and 76 depend from claim 55. Claim 55 is directed to a computer-readable medium and includes determining a packet loss indicator value from transmitted packets transmitted at a second data rate; and selecting a third different data rate in response to the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claims 6-9, 12-15, and 73 (that depend from claim 1), claims 60-63, 66-69, and 76 (that depend from claim 55) are allowable over a combination of Mahany and Yavuz.

Claims 60-63 and 66-67 are separately allowable for at least the following additional reasons. Claims 60-63 and 66-67 depend from claim 59. Claim 59 is directed to an computer-readable medium and includes generating a confidence value for each of a plurality available data rates using the received signal quality value and the packet loss indicator value. For at least the same reasons set forth above with respect to claim 5, claims 60-63 and 66-67 (that depend from claim 59) are allowable over a combination of Mahany and Yavuz.

Claims 66-67 are separately allowable for at least the following additional reasons. Claims 66-67 depend from claim 60. Claim 60 is directed to a computer-readable medium and includes generating an adjustment value for the received signal quality value from the packet loss indicator value. For at least the same reasons set forth above with respect to claim 6, claims 66-67 (that depend from claim 60) are allowable over a combination of Mahany and Yavuz.

### **Conclusion**

By responding in the foregoing remarks only to particular positions taken by the Examiner, Applicants do not acquiesce with other positions that have not been explicitly addressed. In addition, Applicants' arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

Applicants respectfully request that all pending claims be allowed. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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